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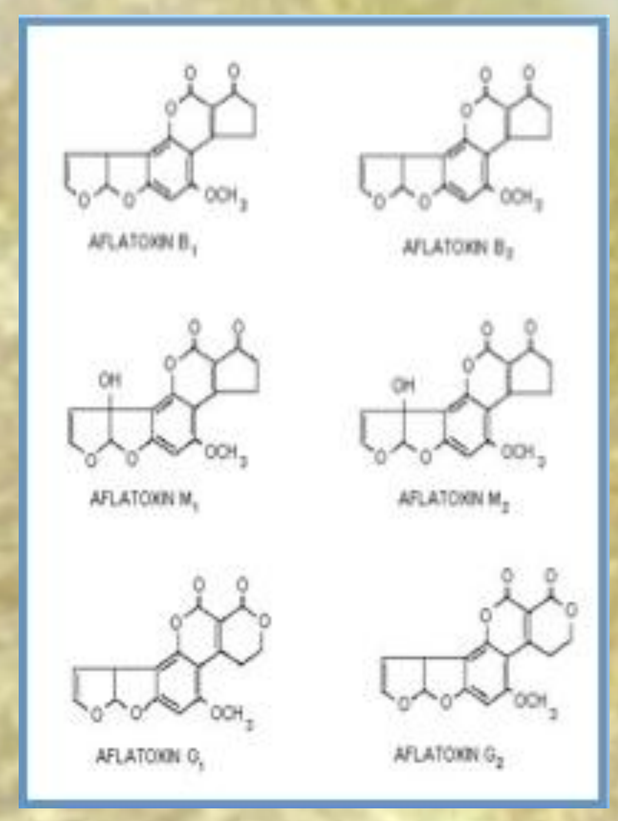
BIOCONTROL DE LES AFLATOXINES EN EL BLAT DE MORO

Corn is one of the most important crops today with more problems associated with the presence of aflatoxins .

Aflatoxins are metabolites (mycotoxins) produced by certain moulds of the genus *Aspergillus*

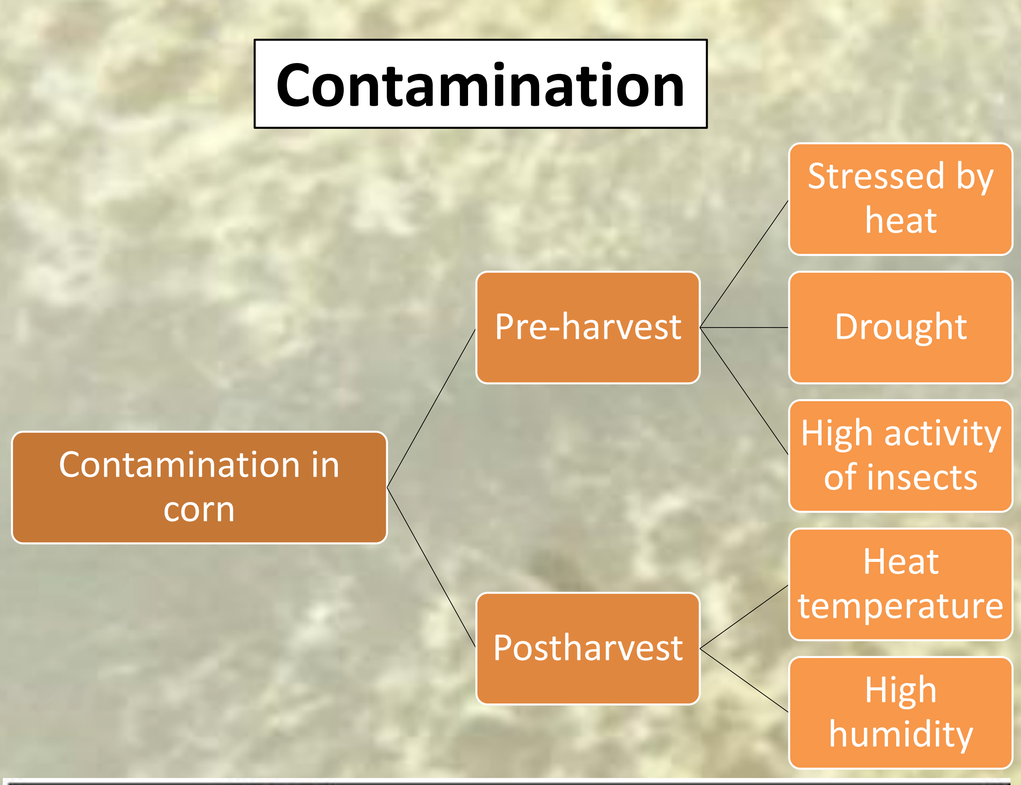
The aim of the study is to carry out an approach to the problem and strategies or systems that have been used so far for the biocontrol of aflatoxin

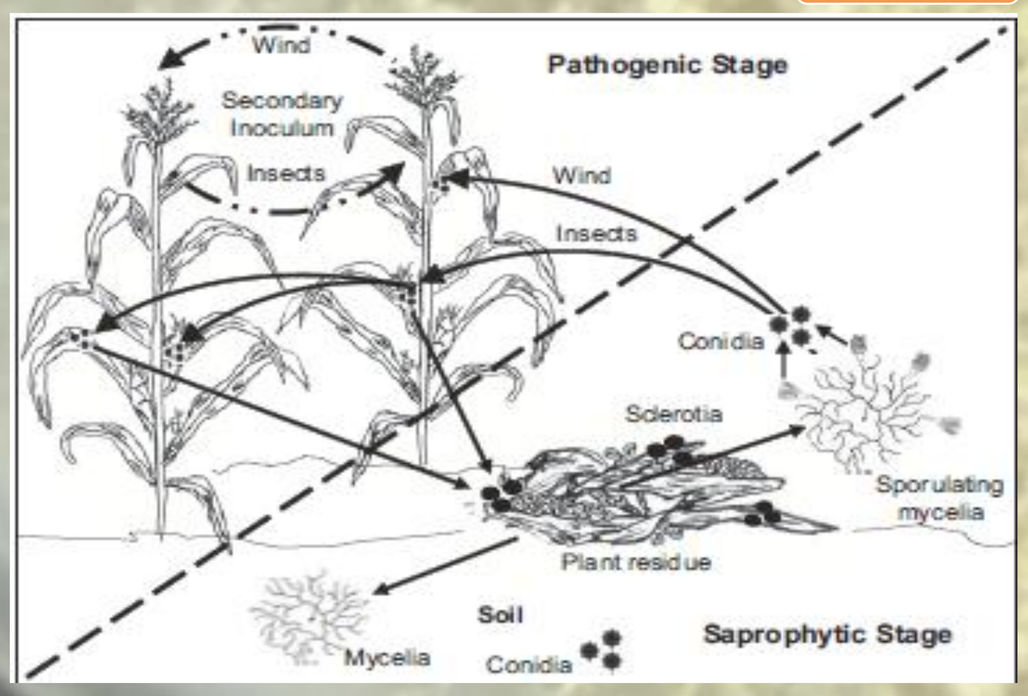
Genere	Subgenere	Section	Species	Aflatoxin
Aspergillus	*Circumdati*	*Flavi*	*A.flavus*	B_1,B_2
			A.parasiticus	B_1,B_2,G_1,G_2



Mycotoxin	Formation	Toxic effects	IARC (International Agency for Research on Cancer)
Aflatoxin B_1 AFB_1	pre-harvest postharvest	Carcinogenic , hepatotoxic , immunosuppressive , teratogenic , mutagenic hemorrhagic	Group 1: carcinogenic to humans

Contamination





Biocontrol

Bacteria	Fungi and yeasts	Non aflatoxigenic *Aspergillus* strains
• *Bacillus* spp. • *Flavobacterium aurantiacum* • LAB • *Pseudomonas* spp.	• *Candida krusei* • *Pichia anomala* • *Trichoderma* spp	• AF36 • NRRL21882 • NRRL21369 • Alfa guard • K49 and CT3

Results

- In bacteria and yeasts have to do more testing in vivo

- AF36 is the most effective on reducing aflatoxins but also producing CPA

- NRRL21882 and K49 are effective reducing aflatoxin not produce CPA

- New method : Hybrid AF36

Conclusions:

Biocontrol is the strategy that has been used to try to avoid the problem of **aflatoxins** in corn because it is less harmful to the environment.

Unlikely that “a one size fits all” strategy will work